AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A transmitter which carries out communication with a receiver by establishing connection of their plurality of communication layers,

the transmitter comprising:

connection request generating means for generating a single connection request containing a command and data required for connecting a number of contiguously adjacent layers among the plurality of communication layers; and

connection request transmitting means for transmitting the single connection request to the receiver so as to establish connection of the plurality of communication layers,

the single connection request containing the command and the data required for connection with the receiver for each of at least three of the contiguously adjacent layers except for communication layers which do not require transmission of the command and the data required for connection with the receiver.

2. (Original) The transmitter as set forth in claim 1, wherein:

the connection request generating means includes in the connection request a command for requesting the receiver to transmit a response with respect to the connection request.

3. (Previously presented) The transmitter as set forth in claim 2, further comprising:

connection setting means for carrying out setting for each of the plurality of communication layers according to the response, which is received from the receiver as a response to the connection request.

4. (Previously presented) The transmitter as set forth in claim 1, further comprising:

connection setting means for carrying out setting for each of the plurality of communication layers, according to the connection request, without receiving a response from the receiver.

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5. (Original) The transmitter as set forth in claim 1, wherein:

the connection request generating means includes in the connection request a command for requesting the receiver to transmit a response during data exchange.

6. (Currently amended) A transmitter which carries out communication with a receiver by establishing connection of their plurality of communication layers,

the transmitter comprising:

disconnection request generating means for generating a single disconnection request containing a command and data required for disconnecting a number of contiguously adjacent layers among the plurality of communication layers; and

disconnection request transmitting means for transmitting the single disconnection request to the receiver so as to disconnect the plurality of communication layers,

the single disconnection request containing the command and the data which are required for disconnection from the receiver for each of at least three of the contiguously adjacent layers except for communication layers which do not require transmission of the command and the data required for disconnection from the receiver.

7. (Currently amended) A transmitter which carries out communication with a receiver by establishing connection of their plurality of communication layers,

the transmitter comprising:

first connection request generating means for generating a single connection request containing a command and data required for connecting a number of contiguously adjacent layers among the plurality of communication layers;

second connection request generating means for generating a connection request containing a command and data required for connection of one of the plurality of communication layers;

selecting means for selecting either of the first connection request generating means and the second connection request generating means so as to generate the connection request; and

connection request transmitting means for transmitting to the receiver the connection request generated by the first or second connection request generating means selected by the selecting means so as to establish connection of the plurality of communication layers,

the single connection request generated by the first connection request generating means containing the command and the data which are required for connection with the receiver for each of <u>at least three of</u> the contiguously adjacent layers except for communication layers which do not require transmission of the command and the data <u>required for connection with the receiver</u>.

8. (Original) The transmitter as set forth in claim 1, wherein:
the communication is performed by infrared communication.

9. (Original) The transmitter as set forth in claim 1, wherein:
the transmitter is a mobile phone.

10. (Original) The transmitter as set forth in claim 1, wherein:
the transmitter is an image-capturing device which transmits a captured-image to the receiver.

11. (Currently amended) A <u>non-transitory</u> computer readable medium storing a communication program for operating the transmitter as set forth in claim 1, the communication program when executed by a processor causing a computer to function as the respective means of the transmitter.

12. (Currently amended) A communication method for a transmitter which carries out communication with a receiver by establishing connection of their plurality of communication layers,
the communication method comprising the steps of:
generating, by connection request generating means, a single connection request containing a command and data required for connecting a number of contiguously adjacent layers among the plurality of communication layers; and
transmitting, by connection request transmitting means, the single connection request to the receiver so as to establish connection of the plurality of communication layers,

the single connection request containing the command and the data which are required for connection with the receiver for each of <u>at least three of</u> the contiguously adjacent layers except for communication layers which do not require transmission of the command and the data <u>required for connection with the receiver</u>.

13. (Currently amended) A receiver which carries out communication with a transmitter by establishing connection of their plurality of communication layers,

the receiver comprising:

connection request receiving means for receiving a single connection request containing a command and data required for connecting a number of contiguously adjacent layers among the plurality of communication layers; and

connection establishing means for extracting the command and data from the single connection request, and establishing connection for each of the plurality of communication layers based on the command and data,

the single connection request containing the command and the data which are required for connection with the transmitter for each of <u>at least three of</u> the contiguously adjacent layers except for communication layers which do not require reception of the command and the data <u>required for connection with the transmitter</u>.

14. (Original) The receiver as set forth in claim 13, further comprising:

response transmitting means for transmitting a response in a case where the connection request contains a command for requesting transmission of response to the connection request.

15. (Original) The receiver as set forth in claim 13, further comprising:

response transmitting means for transmitting a response in a case where the connection request contains a command for requesting transmission of response during data exchange.

16. (Currently amended) A receiver which carries out communication with a transmitter by establishing connection of their plurality of communication layers,

the receiver comprising:

disconnection request receiving means for receiving a single disconnection request containing a command and data required for disconnecting a number of contiguously adjacent layers among the plurality of communication layers; and

disconnecting means for extracting the command and data from the single disconnection request, and carrying out disconnection for each of the plurality of communication layers based on the command and data,

the single disconnection request containing the command and the data which are required for disconnection from the transmitter for each of at least three of the contiguously adjacent layers except for communication layers which do not require reception of the command and the data required for disconnection from the transmitter.

17. (Currently amended) A receiver which carries out communication with a transmitter by establishing connection of their plurality of communication layers,

the receiver comprising:

connection request receiving means for receiving a single connection request containing a command and data which are required for connection with the transmitter for each of at least three of a number of contiguously adjacent layers except for communication layers which do not require transmission of the command and the data required for connection with the transmitter, and a connection request containing a command and data required for establishing a connection of one of the plurality of communication layers; and

connection establishing means for extracting the command and data from the connection request, and establishing connection for each of the plurality of communication layers based on the command and data.

18. (Original) The transmitter as set forth in claim 13, wherein:

the communication is performed by infrared communication.

19. (Original) The receiver as set forth in claim 13, wherein:

the receiver is a broadcast receiving device which receives broadcast from the transmitter.

20. (Original) The receiver as set forth in claim 13, wherein:

the receiver is a broadcast recording device which records broadcast received from the transmitter.

21. (Currently amended) A non-transitory computer readable medium storing a communication program for operating the receiver as set forth in claim 13, the communication program when executed by a processor causing a computer to function as the respective means of the receiver.

22. (Currently amended) A communication method for a receiver which carries out communication with a transmitter by establishing connection of their plurality of communication layers,

the communication method comprising the steps of:

receiving, by connection request receiving means, a single connection request containing a command and data required for connecting a number of contiguously adjacent layers among the plurality of communication layers; and

extracting, by connection establishing means, the command and data from the single connection request, and establishing connection for each of the plurality of communication layers based on the command and data,

the single connection request containing the command and the data which are required for connection with the transmitter for each of at least three of the contiguously adjacent layers except for communication layers which do not require reception of the command and the data required for connection with the transmitter.

23. (Currently amended) A communication system includes a transmitter and a receiver which carry out communication by establishing connection of their plurality of communication layers,

the transmitter comprising:

connection request generating means for generating a single connection request containing a command and data required for connecting a number of contiguously adjacent layers among the plurality of communication layers; and

connection request transmitting means for transmitting the single connection request to the receiver so as to establish connection of the plurality of communication layers,

the receiver comprising:

connection request receiving means for receiving a single connection request containing a command and data required for connecting a number of contiguously adjacent layers among the plurality of communication layers; and

connection establishing means for extracting the command and data from the single connection request, and establishing connection for each of the plurality of communication layers based on the command and data,

the single connection request containing the command and the data which are required for connection between the transmitter and the receiver for each of at least three of the contiguously adjacent layers except for communication layers which do not require transmission and reception of the command and the data required for connection between the transmitter and the receiver.

24. (Previously presented) The transmitter as set forth in claim 1, wherein the plurality of communication layers include at least one upper-level protocol layer in addition to a data link layer.

25. (Previously presented) The transmitter as set forth in claim 24, wherein the at least one upper-level protocol layer includes one or more of a network layer, transport layer, and a session layer.

26. (Previously presented) The transmitter as set forth in claim 1, wherein the connection request generated by the connection request generating means comprises, in addition to a connection parameter for a data link layer, one or more connection parameters for establishing a connection between one or more upper-level protocol layers.

27. (Currently amended) A transmitter which carries out communication with a receiver by establishing connection of their plurality of communication layers,

the transmission comprising:

connection request generating means for generating a single connection request containing data indicating that a destination of transmission is not specified and, a command and data required for connecting a number of contiguously adjacent layers among the plurality of communication layers; and

connection request transmitting means for transmitting the single connection request to the receiver so as to establish connection of the plurality of communication layers,

the single connection request containing the command and the data which are required for connection with the receiver for each of <u>at least three of</u> the contiguously adjacent layers except for communication layers which do not require transmission of the command and the data <u>required for connection with the receiver.</u>